FY 2010 Performance Plan Narrative

NASA's six Strategic Goals are reflected below. Each is clearly defined and supported by Sub-goals (where appropriate), and supported by multi-year Outcomes. The majority of NASA's long-term performance commitments, the Outcomes, have remained the same from FY 2009. These in turn are supported by annual performance goals (APGs) that enhance NASA's ability to measure and report the Agency's progress in achieving its Strategic Goals.

The FY 2010 Performance Plan adds outcomes and APGs that support the Agency Management & Operations (AM&O), Center Management & Operations (CM&O), and Institutional Investments (II) themes established in FY 2009 under the "Cross-Agency Support (CAS)" Appropriation Account.

To better communicate the contribution of these themes along with other mission support elements, the performance measures were structured as function-based, rather than theme-based, Outcomes. Elements involving management of facilities, infrastructure, and information technology continue from FY 2009, but under more strategic Outcome statements. With the development of more strategic Outcomes, activities such as the Shared Capabilities Assets Program no longer provide APGs at the Agency level, but maintain measures used within the AM&O Program. New Outcomes were also established for human capital management, safety and mission assurance, and for launch services and space communications (a Space Operations Appropriations Account element formerly distributed between Strategic Goals 3, 4, 5, and 6). Each of these Outcomes provides "cross agency" support to programs and projects across NASA Mission Directorates, they are listed under the banner of Agency Support.

The Innovative Partnership Program Outcomes and APGs are now all aligned to Strategic Goal 5 to support partnership activities.

The table below provides a summary of all of the Agency commitments identified in the preceding sections. The table also reflects trend information for the Outcomes. Definitions for the trend ratings are as follows:

Outcomes
Green: NASA achieved most APGs under this Outcome and is on-track to achieve or exceed this Outcome.
Yellow: NASA made significant progress toward this Outcome, however, the Agency may not achieve this Outcome as stated.
Red: NASA failed to achieve most of the APGs under this Outcome and does not expect to achieve this Outcome as stated.
White: This Outcome was cancelled by management directive or is no longer applicable based on management changes to the APGs.
None: The stated Outcome did not exist in the years indicated.

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Strategic Goal 1	**Fly the Shuttle as safely as possible until its retirement, not later than 2010.**						
Outcome 1.1	**Assure the safety and integrity of the Space Shuttle workforce, systems and processes, while flying the manifest.**			**Green**	**Yellow**	**Green**	**Green**
APG 10SSP1	Achieve zero Type-A (damage to property at least $1 million or death) or Type-B (damage to property at least $250 thousand or permanent disability or hospitalization of three or more persons) mishaps in FY 2010.	Space Shuttle	Space Shuttle Program				
APG 10SSP2	Complete 100% of all mission objectives for all Space Shuttle missions in FY 2010 as specified in the Flight Requirements Document for each mission.	Space Shuttle	Space Shuttle Program				
Outcome 1.2	**By December 31, 2010, retire the Space Shuttle.**			**None**	**None**	**Green**	**Green**
APG 10SSP03	Complete close-out and transfer plans for all remaining Space Shuttle flight hardware elements and other major Space Shuttle property assets, including the disposition plans for the Orbiters and the means by which significant gaps in human spaceflight operations capabilities will be managed until the first operational flight of the Constellation Program.	Space Shuttle	Space Shuttle Program				
APG 10SSP04	Complete 100% of the Transition Property Assessment for Space Shuttle Program property by no later than the second quarter of FY 2010.	Space Shuttle	Space Shuttle Program				
APG 10SSP05	With the Constellation Program, complete and deliver 2 workforce transition strategy report updates to Congress in FY 2010.	Space Shuttle	Space Shuttle Program				
Strategic Goal 2	**Complete the International Space Station in a manner consistent with NASA's International Partner commitments and the needs of human exploration.**						
Outcome 2.1	**By 2010, complete assembly of the U.S. On-orbit Segment; launch International Partner elements and sparing items required to be launched by the Shuttle; and provide on-orbit resources for research to support U.S. human space exploration.**			**Green**	**Green**	**Green**	**Green**
APG 10ISS01	Based on the actual Space Shuttle flight rate, number of remaining Shuttle flights, and the discussions with the International Partners, update the agreed-to ISS assembly sequence and transportation plan as necessary.	International Space Station	International Space Station Program				
APG 10ISS02	Accomplish a minimum of 90% of the on-orbit research objectives as established one month prior to a given increment.	International Space Station	International Space Station Program				
APG 10ISS03	Per the final configuration agreed to by the International Partners, fly the ISS elements and logistics baselined for FY 2010.	International Space Station	International Space Station Program				
APG 10ISS04	Provide increased ISS capability and utilization by integrating ISS elements, payloads, and spares including the EXPRESS Logistics Carriers 1 through 4, Cupola, Node 3, Multipurpose Pressurized Logistics Module, a COTS demonstration, and Mini-Research Module.	International Space Station	International Space Station Program				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome 2.2	**Through 2015, provide the on-orbit capability to support an ISS crew of 6 crewmembers.**			**None**	**None**	**Green**	**Green**
APG 10ISS05	Achieve zero Type-A (damage to property at least $1 million or death) or Type-B (damage to property at least $250 thousand or permanent disability or hospitalization of 3 or more persons) mishaps in FY 2010.	International Space Station	International Space Station Program				
APG 10ISS07	In concert with the International Partners, maintain a continuous crew presence on the ISS by coordinating and managing resources, logistics, systems, and operational procedures.	International Space Station	International Space Station Program				
APG 10ISS08	Deliver 100% of planned on-orbit resources (including power, data, crew time, logistics, and accommodations) available to support research.	International Space Station	International Space Station Program				
Outcome 2.3	**Conduct basic and applied biological and physical research to advance and sustain U.S. scientific expertise.**			**None**	**None**	**New**	**Green**
APG 10AC01	Deliver 2 out of 3 of the following exploration technology payloads to SOMD for launch to the ISS: 1) Boiling Experiment Facility; 2) Capillary Channel Flow, or several test vessels of the Capillary Flow Experiment-2; or 3) Conduct the tests for the Flame Extinguishment Experiment exploration payload on ISS.	Advanced Capabilities	Exploration Technology Development				
APG 10AC02	Conduct 3 out of 4 of the following non-exploration experiments on the ISS: 1) Dynamical Selection of Interface Patterns; 2) Two samples from Microstructure Formation in Castings of Technical Alloys under Diffusive and Magnetically-Controlled Convective Conditions (MICAST)/Columnar-Equiaxed Transition in Solidification Processing experiment; 3) Binary Critical Aggregation Test-5; or 4) Investigating the Structures of Paramagnetic Aggregates from Colloidal Emulsions-3.	Advanced Capabilities	Exploration Technology Development				
APG 10AC03	Develop for flight two ISS/Shuttle/Free Flyer payloads: Develop the Animal Enclosure Module for launch on the Space Shuttle, to conduct immunology research on rodents; and develop a nano-satellite as a secondary Free Flyer payload to conduct fundamental biological research.	Advanced Capabilities	Exploration Technology Development				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Strategic Goal 3	**Develop a balanced overall program of science, exploration, and aeronautics consistent with the redirection of the human spaceflight program to focus on exploration.**						
Strategic Goal 3A	**Study Earth from space to advance scientific understanding and meet societal needs.**						
Outcome 3A.1	**Progress in understanding and improving predictive capability for changes in the ozone layer, climate forcing, and air quality associated with changes in atmospheric composition.**			**None**	**Green**	**Green**	**Green**
APG 10ES01	Demonstrate progress in understanding and improving predictive capability for changes in the ozone layer, climate forcing, and air quality associated with changes in atmospheric composition (based on measurements from presently orbiting NASA and non-NASA assets). Progress will be evaluated by external expert review.	Earth Science	Multiple Programs				
APG 10ES02	Develop missions in support of this Outcome, as demonstrated by completing Aquarius Operational Readiness Review (ORR).	Earth Science	Earth System Science Pathfinder				
APG 10ES03	Conduct flight program in support of this Outcome, as demonstrated by achieving mission success criteria for Aura.	Earth Science	Earth Systematic Missions				
Outcome 3A.2	**Progress in enabling improved predictive capability for weather and extreme weather events.**			**None**	**Green**	**Green**	**Green**
APG 10ES04	Demonstrate progress in enabling improved predictive capability for weather and extreme weather events. Progress will be evaluated by external expert review.	Earth Science	Multiple Programs				
APG 10ES05	Develop missions in support of this Outcome, as demonstrated by completing the NPOESS Preparatory Project (NPP) Operational Readiness Review (ORR).	Earth Science	Earth Systematic Missions				
APG 10ES06	Develop missions in support of this Outcome, as demonstrated by completing the Global Precipitation Mission (GPM) Critical Design Review (CDR).	Earth Science	Earth Systematic Missions				
Outcome 3A.3	**Progress in quantifying global land cover change and terrestrial and marine productivity, and in improving carbon cycle and ecosystem models.**			**None**	**Green**	**Green**	**Green**
APG 10ES07	Demonstrate progress in quantifying global land cover change and terrestrial and marine productivity, and in improving carbon cycle and ecosystem models. Progress will be evaluated by external expert review.	Earth Science	Multiple Programs				
APG 10ES05	Develop missions in support of this Outcome, as demonstrated by completing the NPOESS Preparatory Project (NPP) Operational Readiness Review (ORR).	Earth Science	Earth Systematic Missions				
APG 10ES08	Develop missions in support of this Outcome, as demonstrated by completing the Landsat Data Continuity Mission (LDCM) Confirmation Review.	Earth Science	Earth Systematic Missions				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome 3A.4	**Progress in quantifying the key reservoirs and fluxes in the global water cycle and in improving models of water cycle change and fresh water availability.**			**None**	**Yellow**	**Green**	**Green**
APG 10ES09	Demonstrate progress in quantifying the key reservoirs and fluxes in the global water cycle and in improving models of water cycle change and fresh water availability. Progress will be evaluated by external expert review.	Earth Science	Multiple Programs				
APG 10ES02	Develop missions in support of this Outcome, as demonstrated by completing Aquarius Operational Readiness Review (ORR).	Earth Science	Earth System Science Pathfinder				
APG 10ES06	Develop missions in support of this Outcome, as demonstrated by completing the Global Precipitation Mission (GPM) Critical Design Review (CDR).	Earth Science	Earth Systematic Missions				
APG 10ES10	Develop missions in support of this Outcome, as demonstrated by completing the SMAP Preliminary Design Review (PDR).	Earth Science	Earth Systematic Missions				
Outcome 3A.5	**Progress in understanding the role of oceans, atmosphere, and ice in the climate system and in improving predictive capability for its future evolution.**			**None**	**Yellow**	**Yellow**	**Yellow**
APG 10ES11	Demonstrate progress in understanding the role of oceans, atmosphere, and ice in the climate system and in improving predictive capability for its future evolution. Progress will be evaluated by external expert review.	Earth Science	Multiple Programs				
APG 10ES05	Develop missions in support of this Outcome, as demonstrated by completing the NPOESS Preparatory Project (NPP) Operational Readiness Review (ORR).	Earth Science	Earth Systematic Missions				
APG 10ES12	Develop missions in support of this Outcome, as demonstrated by completing the ICESat-II Initial Confirmation Review.	Earth Science	Earth System Science Pathfinder				
APG 10ES03	Conduct flight program in support of this Outcome, as demonstrated by achieving mission success criteria for Aura.	Earth Science	Earth Systematic Missions				
Outcome 3A.6	**Progress in characterizing and understanding Earth surface changes and variability of Earth's gravitational and magnetic fields.**			**None**	**Green**	**Green**	**Green**
APG 10ES08	Develop missions in support of this Outcome, as demonstrated by completing the Landsat Data Continuity Mission (LDCM) Confirmation Review.	Earth Science	Earth Systematic Missions				
APG 10ES13	Demonstrate progress in characterizing and understanding Earth surface changes and variability of Earth's gravitational and magnetic fields. Progress will be evaluated by external expert review.	Earth Science	Multiple Programs				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome 3A.7	**Progress in expanding and accelerating the realization of societal benefits from Earth system science.**			**None**	**Green**	**Green**	**Green**
APG 10ES14	Issue 12 reports with partnering organizations that validate using NASA research capabilities (e.g., observations and/or forecast products) could improve their operational decision support systems.	Earth Science	Applied Sciences				
APG 10ES15	Increase the number of distinct users of NASA data and services.	Earth Science	Earth Science Research				
APG 10ES16	Maintain a high level of customer satisfaction, as measured by exceeding the most recently available federal government average rating of the Customer Satisfaction Index.	Earth Science	Earth Science Research				
Strategic Goal 3B	**Understand the Sun and its effects on Earth and the solar system.**						
Outcome 3B.1	**Progress in understanding the fundamental physical processes of the space environment from the Sun to Earth, to other planets, and beyond to the interstellar medium.**			**Green**	**Green**	**Green**	**Green**
APG 10HE01	Demonstrate progress in understanding the fundamental physical processes of the space environment from the Sun to Earth, to other planets, and beyond to the interstellar medium. Progress will be evaluated by external expert review.	Heliophysics	Multiple Programs				
APG 10HE02	Develop missions in support of this Outcome, as demonstrated by completing the Magnetospheric Multiscale (MMS) spacecraft Critical Design Review (CDR).	Heliophysics	Solar Terrestrial Probes				
APG 10HE03	Develop missions in support of this Outcome, as demonstrated by completing the Geospace Radiation Belt Storm Probes Critical Design Review (CDR).	Heliophysics	Living with a Star				
APG 10HE04	Develop missions in support of this Outcome, as demonstrated by awarding Solar Probe instrument contracts.	Heliophysics	Heliophysics Explorer Program				
APG 10HE05	Conduct flight program in support of this Outcome, as demonstrated by achieving mission success criteria for Hinode (Solar-B), THEMIS, and IBEX.	Heliophysics	Multiple Programs				
Outcome 3B.2	**Progress in understanding how human society, technological systems, and the habitability of planets are affected by solar variability and planetary magnetic fields.**			**Green**	**Green**	**Green**	**Green**
APG 10HE02	Develop missions in support of this Outcome, as demonstrated by completing the Magnetospheric Multiscale (MMS) spacecraft Critical Design Review (CDR).	Heliophysics	Solar Terrestrial Probes				
APG 10HE03	Develop missions in support of this Outcome, as demonstrated by completing the Geospace Radiation Belt Storm Probes Critical Design Review (CDR).	Heliophysics	Living with a Star				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
APG 10HE04	Develop missions in support of this Outcome, as demonstrated by awarding Solar Probe instrument contracts.	Heliophysics	Heliophysics Explorer Program				
APG 10HE06	Demonstrate progress in understanding how human society, technological systems, and the habitability of planets are affected by solar variability and planetary magnetic fields. Progress will be evaluated by external expert review.	Heliophysics	Multiple Programs				
APG 10HE07	Conduct flight program in support of this Outcome, as demonstrated by achieving mission success criteria for THEMIS.	Heliophysics	Multiple Programs				
Outcome 3B.3	**Progress in developing the capability to predict the extreme and dynamic conditions in space in order to maximize the safety and productivity of human and robotic explorers.**			**Green**	**Green**	**Green**	**Green**
APG 10HE03	Develop missions in support of this Outcome, as demonstrated by completing the Geospace Radiation Belt Storm Probes Critical Design Review (CDR).	Heliophysics	Living with a Star				
APG 10HE08	Demonstrate progress in developing the capability to predict the extreme and dynamic conditions in space in order to maximize the safety and productivity of human and robotic explorers. Progress will be evaluated by external expert review.	Heliophysics	Multiple Programs				
Strategic Goal 3C	**Advance scientific knowledge of the origin and history of the solar system, the potential for life elsewhere, and the hazards and resources present as humans explore space.**						
Outcome 3C.1	**Progress in learning how the Sun's family of planets and minor bodies originated and evolved.**			**Green**	**Green**	**Green**	**Green**
APG 10PS01	Demonstrate progress in learning how the Sun's family of planets and minor bodies originated and evolved. Progress will be evaluated by external expert review.	Planetary Science	Multiple Programs				
APG 10PS02	Develop missions in support of this Outcome, as demonstrated by completing the Juno Systems Integration Review (SIR).	Planetary Science	New Frontiers				
APG 10PS03	Develop missions in support of this Outcome, as demonstrated by completing the GRAIL Critical Design Review (CDR).	Planetary Science	Discovery				
APG 10PS04	Develop missions in support of this Outcome, as demonstrated by selecting New Frontiers 3 concept studies.	Planetary Science	New Frontiers				
APG 10PS05	Develop missions in support of this Outcome, as demonstrated by selecting Discovery 12 concept studies.	Planetary Science	Discovery				
APG 10PS06	Develop missions in support of this Outcome, as demonstration by completing the Mars Science Laboratory flight hardware builds and flight system assemblies.	Planetary Science	Mars Exploration				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome 3C.2	**Progress in understanding the processes that determine the history and future of habitability in the solar system, including the origin and evolution of Earth's biosphere and the character and extent of prebiotic chemistry on Mars and other worlds.**			**Green**	**Green**	**Green**	**Green**
APG 10PS02	Develop missions in support of this Outcome, as demonstrated by completing the Juno Systems Integration Review (SIR).	Planetary Science	New Frontiers				
APG 10PS07	Demonstrate progress in understanding the processes that determine the history and future of habitability in the solar system, including the origin and evolution of Earth's biosphere and the character and extent of prebiotic chemistry on Mars and other worlds. Progress will be evaluated by external expert review.	Planetary Science	Mars Exploration				
APG 10PS08	Develop missions in support of this Outcome, as demonstrated by completing the Mars Atmosphere and Volatile Evolution Mission (MAVEN) Preliminary Design Review (PDR).	Planetary Science					
APG 10PS06	Develop missions in support of this Outcome, as demonstration by completing the Mars Science Laboratory flight hardware builds and flight system assemblies.	Planetary Science	Mars Exploration				
Outcome 3C.3	**Progress in identifying and investigating past or present habitable environments on Mars and other worlds, and determining if there is or ever has been life elsewhere in the solar system.**			**Green**	**Green**	**Green**	**Green**
APG 10PS02	Develop missions in support of this Outcome, as demonstrated by completing the Juno Systems Integration Review (SIR).	Planetary Science	New Frontiers				
APG 10PS06	Develop missions in support of this Outcome, as demonstration by completing the Mars Science Laboratory flight hardware builds and flight system assemblies.	Planetary Science	Mars Exploration				
APG 10PS07	Develop missions in support of this Outcome, as demonstrated by completing the Mars Atmosphere and Volatile Evolution Mission (MAVEN) Preliminary Design Review (PDR).	Planetary Science	Mars Exploration				
APG 10PS09	Demonstrate progress in identifying and investigating past or present habitable environments on Mars and other worlds, and determining if there is or ever has been life elsewhere in the solar system. Progress will be evaluated by external expert review.	Planetary Science	Multiple Programs				
Outcome 3C.4	**Progress in exploring the space environment to discover potential hazards to humans and to search for resources that would enable human presence.**			**Green**	**Green**	**Green**	**Green**
APG 10PS11	Develop missions in support of this Outcome, as demonstrated by completing the LADEE Critical Design Review (CDR).	Planetary Science	Lunar Quest				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
APG 10PS10	Demonstrate progress in exploring the space environment to discover potential hazards to humans and to search for resources that would enable human presence. Progress will be evaluated by external expert review.	Planetary Science	Multiple Programs				
APG 10PS06	Develop missions in support of this Outcome, as demonstration by completing the Mars Science Laboratory flight hardware builds and flight system assemblies.	Planetary Science	Mars Exploration				
Strategic Goal 3D	**Discover the origin, structure, evolution, and destiny of the universe, and search for Earth-like planets.**						
Outcome 3D.1	**Progress in understanding the origin and destiny of the universe, phenomena near black holes, and the nature of gravity.**			**Green**	**Green**	**Green**	**Green**
APG 10AS01	Demonstrate progress in understanding the origin and destiny of the universe, phenomena near black holes, and the nature of gravity. Progress will be evaluated by external expert review.	Astrophysics	Multiple Programs				
APG 10AS02	Develop missions in support of this Outcome, as demonstrated by completing the NuSTAR Critical Design Review (CDR).	Astrophysics	Astrophysics Explorer				
APG 10AS03	Develop missions in support of this Outcome, as demonstrated by selecting Joint Dark Energy Mission (JDEM) science investigations.	Astrophysics	Beyond Einstein				
APG 10AS04	Conduct flight program in support of this Outcome, as demonstrated by achieving mission success criteria for GLAST.	Astrophysics	Gamma-ray Large Space Telescope				
Outcome 3D.2	**Progress in understanding how the first stars and galaxies formed, and how they changed over time into the objects recognized in the present universe.**			**Green**	**Yellow**	**Green**	**Green**
APG 10AS05	Demonstrate progress in understanding how the first stars and galaxies formed, and how they changed over time into the objects we recognize in the present universe. Progress will be evaluated by external expert review.	Astrophysics	Multiple Programs				
APG 10AS06	Develop missions in support of this Outcome, as demonstrated by completing the James Webb Space Telescope (JWST) Optical Telescope Element Critical Design Review (CDR).	Astrophysics	James Webb Space Telescope				
APG 10AS07	Develop missions in support of this Outcome, as demonstrated by completing the first competed Early Science observations on the Stratospheric Observatory for Infrared Astronomy (SOFIA).	Astrophysics	Stratospheric Observatory for Infrared Astronomy				
APG 10AS08	Conduct flight program in support of this Outcome, as demonstrated by achieving mission success criteria for WISE.	Astrophysics	Cosmic Origins				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome 3D.3	**Progress in understanding how individual stars form and how those processes ultimately affect the formation of planetary systems.**			**Green**	**Yellow**	**Green**	**Green**
APG 10AS06	Develop missions in support of this Outcome, as demonstrated by completing the James Webb Space Telescope (JWST) Optical Telescope Element Critical Design Review (CDR).	Astrophysics	James Webb Space Telescope				
APG 10AS07	Develop missions in support of this Outcome, as demonstrated by completing the first competed Early Science observations on the Stratospheric Observatory for Infrared Astronomy (SOFIA).	Astrophysics	Stratospheric Observatory for Infrared Astronomy				
APG 10AS09	Demonstrate progress in understanding how individual stars form and how those processes ultimately affect the formation of planetary systems. Progress will be evaluated by external expert review.	Astrophysics	Multiple Programs				
Outcome 3D.4	**Progress in creating a census of extra-solar planets and measuring their properties.**			**Green**	**Yellow**	**Yellow**	**Green**
APG 10AS10	Demonstrate progress in creating a census of extra-solar planets and measuring their properties. Progress will be evaluated by external expert review.	Astrophysics	Multiple Programs				
Strategic Goal 3E	**Advance knowledge in the fundamental disciplines of aeronautics, and develop technologies for safer aircraft and higher capacity airspace systems.**						
Outcome 3E.1	**By 2016, identify and develop tools, methods, and technologies for improving overall aircraft safety of new and legacy vehicles operating in the Next Generation Air Transportation System (projected for the year 2025).**			**None**	**Green**	**Green**	**Green**
APG 10AT01	Using 2008 as a baseline, demonstrate, on a representative current generation electro-mechanical system test bed, improved IVHM via Bayesian methods and/or models for varying operating conditions and demonstrate fault detection/diagnosis on at least three faults types and examine tradeoff between accuracy and diagnosis time.	Aeronautics	Aviation Safety				
APG 10AT02	Develop an atomistically-based model capable of predicting within 25%, the degradation caused by environmental effects on interfaces in selected polymer matrix composite materials.	Aeronautics	Aviation Safety				
APG 10AT03	Deliver and validate through analysis flight deck guidelines, information, and display requirements that meet NextGen operational needs as established in 2007 baseline assessment, and without a measurable increase to safety risk.	Aeronautics	Aviation Safety				
APG 10AT04	Develop a tool suite that provides an order of magnitude reduction in analysis time over current Monte-Carlo simulation methods that would be used to locate failure points in the flight envelope for a chosen adaptive control system and a set of adverse events.	Aeronautics	Aviation Safety				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome 3E.2	**By 2016, develop and demonstrate future concepts, capabilities, and technologies that will enable major increases in air traffic management effectiveness, flexibility, and efficiency, while maintaining safety, to meet capacity and mobility requirements of the Next Generation Air Transportation System.**			**None**	**Green**	**Green**	**Green**
APG 10AT05	Conduct simulations of automated separation assurance with sequencing, spacing, and scheduling constraints.	Aeronautics	Airspace Systems				
APG 10AT06	Determine the feasibility and benefits of one or more candidate Multi-Sector Planner concepts.	Aeronautics	Airspace Systems				
Outcome 3E.3	**By 2016, develop multidisciplinary analysis and design tools and new technologies, enabling better vehicle performance (e.g., efficiency, environmental, civil competitiveness, productivity, and reliability) in multiple flight regimes and within a variety of transportation system architectures.**			**None**	**Green**	**Green**	**Green**
APG 10AT07	Complete new suite of integrated multidisciplinary analysis tools to predict noise, NOx, takeoff/landing performance, cruise performance, and Take-Off Gross Weight (TOGW) for conventional ("tube and wing") aircraft and unconventional aircraft (e.g. hybrid wind-body).	Aeronautics	Fundamental Aeronautics				
APG 10AT08	Demonstrate control concepts through flight simulation that would contribute towards development of a flight control optimization tool for variable speed engine and transmission with no negative handling quality effects.	Aeronautics	Fundamental Aeronautics				
APG 10AT09	Develop computational models to predict integrated inlet and fan performance and operability and compare models to experimental data.	Aeronautics	Fundamental Aeronautics				
APG 10AT10	Complete CFD predictions of ramjet-to-scramjet mode-transition and compare to wind tunnel and/or X-51 flight test data.	Aeronautics	Fundamental Aeronautics				
Outcome 3E.4	**Ensure the continuous availability of a portfolio of NASA-owned wind tunnels/ground test facilities, which are strategically important to meeting national aerospace program goals and requirements.**			**None**	**None**	**None**	**Green**
APG 10AT11	Achieve test customer evaluation ratings averaging greater than 90% for overall quality and timeliness of ATP facility operations, based on feedback received in post-test customer surveys.	Aeronautics	Aeronautics Test Program				
Outcome 3E.5	**For vehicle and propulsion technologies that simultaneously reduce fuel burn, noise, and emissions, by 2016 develop a well-informed trade space, document performance potential, and identify technical risks to a level that enables incorporation of the technologies into the design of new aircraft.**						
APG 10AT12	In FY 2010, award a contract to conduct N+2 vehicle systems-studies.	Aeronautics	Integrated Systems Research Program				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Strategic Goal 3F	**Understand the effects of the space environment on human performance, and test new technologies and countermeasures for long-duration human space exploration.**						
Outcome 3F.1	**By 2016, develop and test candidate countermeasures to ensure the health of humans traveling in space.**			**None**	**Green**	**Green**	**Green**
APG 10AC04	Deliver a Human Interface Design Handbook for use in designing exploration vehicles.	Advanced Capabilities	Human Research Program				
APG 10AC05	Deliver and publish an initial version of the acute radiation risk projection model for lunar missions.	Advanced Capabilities	Human Research Program				
APG 10AC06	Deliver a device for launch to ISS to test the technology of producing medical grade water on a spacecraft.	Advanced Capabilities	Human Research Program				
APG 10AC07	Complete the assessment study of a capability to test bone & muscle countermeasures in simulated lunar gravity.	Advanced Capabilities	Human Research Program				
APG 10AC08	Complete the 2010 quantitative assessment of the uncertainties in cancer risk projections for space radiation exposures in support of lunar exploration missions.	Advanced Capabilities	Human Research Program				
Outcome 3F.2	**By 2012, identify and test technologies to reduce total mission resource requirements for life support systems.**			**Green**	**Green**	**Green**	**Green**
APG 10AC09	As part of technology development for closed-loop air revitalization for lunar surface habitats, conduct a trade study to evaluate candidate technologies for carbon dioxide reduction in support of down selection for development of a breadboard unit.	Advanced Capabilities	Exploration Technology Development				
APG 10AC10	Develop and test candidate technologies for production of high-pressure gases for potential use for recharge of oxygen for Extra Vehicular Activity (EVA) portable life support systems for planetary surface missions.	Advanced Capabilities	Exploration Technology Development				
Outcome 3F.3	**By 2012, develop reliable spacecraft technologies for advanced environmental monitoring and control and fire safety.**			**None**	**Green**	**Green**	**Green**
APG 10AC11	Demonstrate 6 months of experimental operation of the Electronic Nose (ENose) on orbit.	Advanced Capabilities	Exploration Technology Development				
APG 10AC12	Demonstrate 1 year of experimental operation of the Vehicle Cabin Atmosphere Monitoring (VCAM) system on orbit.	Advanced Capabilities	Exploration Technology Development				
Outcome 3F.4	**By 2012, identify and develop tools, methods, and technologies for assessing, improving and maintaining the overall health of the astronaut corps, for mission lengths up to 180 days in microgravity or 1/6 G.**						
APG 10SFS01	Capture 43% of current and former astronaut medical requirements data will be captured in a comprehensive medical data management infrastructure.	Space & Flight Support	Crew Health & Safety				

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Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
APG 10SFS02	Create a set of clinical practice guidelines for monitoring known risks associated with space flight.	Space & Flight Support	Crew Health & Safety				
APG 10SFS03	Capture 100% of medical and environmental data required by Medical Operations in a form capable of queries.	Space & Flight Support	Crew Health & Safety				
APG 10SFS04	Create an integrated concept of operations to use ultrasound for ground-based clinical care as a test bed for in flight uses.	Space & Flight Support	Crew Health & Safety				
Strategic Goal 4	**Bring a new Crew Exploration Vehicle into service as soon as possible after Shuttle retirement.**						
Outcome 4.1	**No later than 2015, transport three crewmembers to the International Space Station and return them safely to Earth, demonstrating an operational capability to support human exploration missions.**			**Green**	**Green**	**Yellow**	**Yellow**
APG 10CS01	Complete Pad Abort-1 test for the Orion Crew Exploration Vehicle.	Constellation Systems	Constellation (Cx) Systems Program				
APG 10CS02	Complete the integrated Preliminary Design Review (PDR) for the Constellation Program.	Constellation Systems	Cx Systems Program				
APG 10CS03	Complete Ares 1 First Stage Development Motor (DM 1) test firing.	Constellation Systems	Cx Systems Program				
APG 10CS04	Complete the Thrust Oscillation Preliminary Design Review (PDR) for Ares I.	Constellation Systems	Cx Systems Program				
APG 10CS05	Complete the Preliminary Design Review (PDR) for the Ground Operations (GO) Project.	Constellation Systems	Cx Systems Program				
APG 10CS06	Complete the Preliminary Design Review (PDR) for the Mission Operations (MO) Project.	Constellation Systems	Cx Systems Program				
Strategic Goal 5	**Encourage the pursuit of appropriate partnerships with the emerging commercial space sector.**						
Outcome 5.1	**Develop and demonstrate a means for NASA to purchase launch services from emerging launch providers.**			**Green**	**Green**	**Green**	**Green**
APG 10SFS05	The Launch Service Program will capture 100% of significant technical interchange information with emerging launch providers as provided under existing contract mechanisms. The Engineering Review Board Information System (ERBIS) will be used to capture specific technical recommendations and opportunities for risk reduction.	Space & Flight Support	Launch Services				
Outcome 5.2	**By 2010, demonstrate one or more commercial space capabilities for ISS cargo and/or crew transport.**			**Green**	**Green**	**Green**	**Green**
APG 10CS07	In FY 2010, have at least one partner demonstrate flight proximity operations with ISS.	Constellation Systems	Cx Systems Program				
APG 10CS08	By the end of FY 2010, conduct one or more demonstration flights to, and berth with, the ISS.	Constellation Systems	Cx Systems Program				

FY 2010 Performance Plan

Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome 5.3	**Promote and develop innovative technology partnerships among NASA, U.S. industry, and other sectors for the benefit of Agency programs and projects.**			**Green**	**Green**	**Green**	**Green**
APG 10IPP01	Document 40 notable technology transfer successes documented in NASA's Spinoff publication.	Agency Management & Operations (AMO)	Innovative Partnerships Program (IPP)				
APG 10IPP02	Produce 1100 New Technology Reports (NTRs) produced, representing the new technologies available for potential transfer.	AMO	IPP				
APG 10IPP03	Ratio of total number of licenses generated from the Intellectual Property (IP) portfolio of patents from the last five years relative to the number of patents in that portfolio is equivalent to 40%.	AMO	IPP				
APG 10IPP04	Initiate or expand 29 SBIR/STTR Phase III contracts.	AMO	IPP				
APG 10IPP05	Achieve 175 technology readiness level (TRL) advancements from the Innovative Partnerships Program portfolio of technology development.	AMO	IPP				
APG 10IPP06	Infuse 68 technologies into NASA programs/projects from total Innovative Partnerships Program portfolio.	AMO	IPP				
APG 10IPP07	Ratio of SBIR/STTR technologies successfully infused into NASA programs/projects relative to the prior five years of SBIR/STTR Phase II contracts issued is equivalent to 21%.	AMO	IPP				
Strategic Goal 6	**Establish a lunar return program having the maximum possible utility for later missions to Mars and other destinations.**						
Outcome 6.1	**By 2012, complete the transition of applicable Shuttle components, infrastructure, and workforce to the Constellation Systems program.**						
APG 10CS09	Complete the Exploration Requirements for Institutional Capabilities (ERIC) database update and develop a coordinated final SOMD/ESMD report that incorporates the ERIC update with the Space Shuttle Program's final assessment of real property.	Constellation Systems	Cx Systems Program				
APG 10CS10	Complete the Constellation Assessment of Personal Property (CAPP) for Space Shuttle Program property.	Constellation Systems	Cx Systems Program				
APG 10CS11	With the Space Shuttle Program, complete and deliver 2 agency workforce transition strategy report updates to Congress.	Constellation Systems	Cx Systems Program				
Outcome 6.2	**By 2016, develop and test technologies for in situ resource utilization, power generation, and autonomous systems that reduce consumables launched from Earth and moderate mission risk.**			**Green**	**Green**	**Green**	**Green**
APG 10AC13	Demonstrate autonomous hazard avoidance system for Altair lunar lander in helicopter flight test.	Advanced Capabilities	Exploration Technology Development				

FY 2010 Performance Plan

Measure	Description	Contributing Theme	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome 6.3	**By 2013, sufficiently develop and test technologies for nuclear power systems to enable an informed selection of systems for flight development to provide power to a lunar outpost.**			**None**	**None**	**None**	**Green**
APG 10AC14	Liquid-metal pump Demonstration – Complete final report of performance testing of a prototypic annular linear induction pump with sodium-potassium fluid at operating temperatures and flow rates that are relevant to a future 40 kilowatt fission surface power system.	Advanced Capabilities	Exploration Technology Development				
Outcome 6.4	**No later than 2020, demonstrate the capability to conduct an extended human expedition to the lunar surface and lay the foundation for extending human presence across the solar system.**					**None**	**Green**
APG 10CS12	Conduct the Lunar Capabilities SRR to define the lunar mission architecture requirements.	Constellation Systems	Cx Systems Program				
APG 10AC15	Develop concepts for manufacturing 10-meter diameter composite structures for the Ares V launch vehicle.	Advanced Capabilities	Lunar Precursor Robotic Program (LPRP)				
APG 10AC16	Test prototype main engine for Altair lunar lander ascent stage using liquid oxygen and liquid methane propellants.	Advanced Capabilities	LPRP				
APG 10AC17	Complete LRO's primary mission and deposit 50% of the data to the Planetary Data System.	Advanced Capabilities	LPRP				
APG 10AC18	Complete the Lunar Crater Observation and Sensing Satellite (LCROSS) mission.	Advanced Capabilities	LPRP				
APG 10DIO01	Conduct at least 3 multilateral workshops with international space agencies to discuss the potential for international participation in the exploration of the lunar surface.	Constellation Systems	Cx Systems Program				
APG 10OER01	Facilitate the exchange of at least 10 letters between the NASA Administrator and his/her international space agency counterparts, introducing the Administrator and outlining his/her vision for international cooperation.	AMO	Agency Management				

FY 2010 Performance Plan
Cross-Agency Support Programs

Measure	Description	Contributing Theme(s)	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
	EDUCATION						
Outcome ED.1	**Contribute to the development of the Science, Technology, Engineering and Math (STEM) workforce in disciplines needed to achieve NASA's Strategic Goals, through a portfolio of investments.**			**Green**	**Green**	**Green**	**Green**
APG 10ED01	Support the development of 60 new or revised courses targeted at the STEM skills needed by NASA.	Education	Education Program				
APG 10ED02	Serve 200 institutions in designated EPSCoR states.	Education	Education Program				
APG 10ED03	Serve 8,500 under-represented and under-served students in NASA higher education programs.	Education	Education Program				
APG 10ED04	Achieve 60% employment of student participants in FY 2009 NASA higher education programs by NASA, aerospace contractors, universities, and other educational institutions.	Education	Education Program				
APG 10ED05	Achieve 45% pursuit of advanced education in NASA-related disciplines of undergraduate students in FY 2009 NASA higher education programs	Education	Education Program				
APG 10WF11	Provide equal opportunity (EO) onsite assessment and technical assistance to three STEM programs receiving NASA funding, and EO technical assistance to an additional 25 NASA-funded STEM programs.	AMO	Agency Management				
Outcome ED.2	**Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers and faculty.**						**Green**
APG 10ED06	Achieve 50% or greater level of interest in science, technology, engineering and math (STEM) careers among elementary and secondary students participating in NASA education programs.	Education	Education Program				
APG 10ED07	Increase to 60% the percentage of elementary and secondary educators who either obtain NASA content-based education resources or participate in short-duration NASA education activities, and use NASA resources in their classroom instruction (a 1% annual increase above the FY 2007 baseline of 55%).	Education	Education Program				
APG 10ED08	Increase to 470,000 the number of elementary and secondary student participants in NASA instruction and enrichment activities (a 5% annual increase above the FY 2007 baseline of 408,774).	Education	Education Program				
APG 10ED09	Assure, in FY 2010, 75% of elementary and secondary educators who participate in NASA training programs use NASA resources in their classroom instruction, an annual increase of 5% in the FY 2007 baseline of 62%.	Education	Education Program				

FY 2010 Performance Plan
Cross-Agency Support Programs

Measure	Description	Contributing Theme(s)	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome ED.3	**Build strategic partnerships and linkages between STEM formal and informal education providers that promote STEM literacy and awareness of NASA's mission.**			**Green**	**None**	**Green**	**Green**
10ED10	Assure that at least 350 museums and space centers across the country actively engage the public through NASA content.	Education	Education Program				
	AGENCY SUPPORT (Contributions from Cross Agency Support (CAS) and Programmatic Appropriation Accounts)						
Outcome AS.1	**Develop, implement, and maintain modern, secure, and high-quality information technology systems and infrastructure to achieve agency mission objectives with the lowest life-cycle cost and least risk.**						
APG 10IT01	Complete migration to the NASA Consolidated Active Directory.	AMO; Center Management & Operations (CMO)	Agency IT Services (AITS)				
APG 10IT02	Complete Operational Readiness Review (ORR) for the NASA Communications Initiative.	AMO; CMO	AITS				
APG 10IT03	Complete integration of Personal Identity Verification (PIV) cards with the desktop.	AMO; CMO	AITS				
APG 10IT04	Complete planned capacity increase to the NASA Wide Area Network.	AMO; CMO	AITS				
APG 10IT05	Complete planned upgrades to networks at Ames Research Center, Glenn Research Center, Goddard Space Flight Center, Kennedy Space Center, Marshall Space Flight Center, and Stennis Space Center.	AMO; CMO	AITS				
APG 10IT06	Complete Operational Readiness Review (ORR) for the NASA Security Operations Center.	AMO; CMO	AITS				
APG 10IT07	By 2010, increase reutilizations of accountable personal property by 2% from the baseline of 5%.	AMO; CMO	AITS				
APG 10IT08	In FY 2010, increase the percentage of total travel bookings completed on-line to at least 60% (baseline is 1.8%).	AMO; CMO	AITS				
APG 10IT09	In FY 2010, increase the total number of solicitations developed in PRISM to at least 80%.	AMO; CMO	AITS				
APG 10IT10	Reduce runtimes of the most heavily accessed Business Warehouse reports by at least 40%.	AMO; CMO	AITS				
Outcome AS.2	**Develop and align workforce strategies, programs, policies and processes to be consistent with the Agency's mission.**						
APG 10WF01	Complete all FY 2010 planned actions for the FY 2008-FY 2010 NASA Model EEO Agency Plan.	AMO; CMO	Agency Management				
APG 10WF02	Complete development of the Agency strategy for deployment of a diversity and inclusion framework.	AMO; CMO	Agency Management				
APG 10WF03	Complete implementation of a certification program to ensure that Program and Project Managers meet Federal Acquisition Certification Requirements before or within one year of assuming leadership of major acquisition projects.	AMO; CMO	Safety & Mission Success (SMS)				

FY 2010 Performance Plan
Cross-Agency Support Programs

Measure	Description	Contributing Theme(s)	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
APG 10WF04	Complete full roll-out of the new mid-level leadership development program, targeted at the GS13 through GS15 levels, to ensure continued development of a cadre of potential future NASA leaders and support succession management efforts.	AMO; CMO	Agency Management				
APG 10WF05	Engage with the Mission Directorates, Centers and Mission Support offices in the development of a 5-year workforce plan, matching workforce capabilities with mission needs. Eliminate unassigned civil service workforce in all years of the planning horizon.	AMO; CMO	Agency Management				
APG 10WF06	By March 2010, complete Phase 4 of Shuttle Transition workforce mapping to identify final detailed Shuttle workforce composition and disposition issues and any required actions.	AMO; CMO	Agency Management				
Outcome AS. 3	**Ensure the strategic availability and maintenance of facilities which are necessary to meet the long-term needs and requirements of the Agency.**						
APG 10FAC01	Assure that at least 50% of the NASA Centers have updated their Master Plans to implement Agency Strategic Direction from the Facilities Program Board.	Institutional Investments; AMO; CMO	Agency Management				
APG 10FAC02	Perform a test case review of one of the Agency's major technical portfolios to determine consolidations and/or investments.	AMO; CMO; Strategic Capabilities Assets Program	Agency Management				
APG 10FAC03	Conduct a facility requirements review for the Altair Project requirements through qualification testing.	AMO; CMO	Agency Management				
Outcome AS.4	**While promoting mission success, protect the public, NASA workforce, high-value equipment and property from potential harm as a result of NASA activities and operations by factoring safety, quality, risk, reliability and maintainability as integral features of programs, projects, technologies, operations, and facilities.**						
APG 10SMS01	No fatalities or permanent disabling injuries to the public resulting from NASA activities during fiscal year.	AMO; CMO	SMS				
APG 10SMS02	No fatalities or permanent disabling injuries to the NASA workforce resulting from NASA activities during fiscal year.	AMO; CMO	SMS				
APG 10SMS03	Reduce damage to NASA assets by 10% per fiscal year.	AMO; CMO	SMS				
APG 10SMS04	Maximize achievement of mission success criteria for all NASA programs/projects in the fiscal year.	AMO; CMO	SMS				

FY 2010 Performance Plan
Cross-Agency Support Programs

Measure	Description	Contributing Theme(s)	Contributing Program(s)	Multi-year Outcome ratings FY 05	FY 06	FY 07	FY 08
Outcome AS.5	**Implement the space communications and navigation architecture and provide space launch capabilities responsive to existing and future science and space exploration mission requirements.**						
APG 10SFS06	Complete the assessment of Array Antenna size in support of the long term plans for the 70 meter antenna decommissioning and replacement.	Space & Flight Support	Space Communications & Navigation (SCaN)				
APG 10SFS07	Complete TDRS K/L Project Mission Operations Review (MOR).	Space & Flight Support	SCaN				
APG 10SFS08	Complete SN Ground Segment Sustainment project (SGSS) Mission Definition Review (MDR).	Space & Flight Support	SCaN				
APG 10SFS09	Identify agency rocket propulsion test core capabilities (both infrastructure and critical skills) and maintain them at appropriate levels to be able to meet NASA's current and future rocket testing requirements, and deliver an integrated agency-level Rocket Propulsion Test Plan that spans the next ten years and includes DoD and commercial partner requirements and capabilities, as appropriate.	Space & Flight Support	Rocket Propulsion Testing				
APG 10SFS10	Maintain or acquire launch services capabilities (both infrastructure and skills) at levels needed to meet NASA's current and future launch services requirements efficiently and effectively.	Space & Flight Support	Rocket Propulsion Testing				
APG 10SFS11	Complete 100% of Launch Service objectives for all NASA-managed expendable launches in FY 2010 as specified in the Interface Control Document for each mission.	Space & Flight Support	Rocket Propulsion Testing				

FY 2010 Performance Plan
Uniform and Efficiency Measures

Measure	Description
Advanced Capabilities Theme	
APG 10AC13	Complete all development projects within 110% of the cost and schedule baseline.
APG 10AC14	Demonstrate improvements in the EVA Work Efficiency Index for astronauts using a small, pressurized rover with suit-ports compared to astronauts using an unpressurized rover. Work efficiency index=(time to complete a task)/(total time to prepare for EVA).
Aeronautics Theme	
APG 10AT13	Deliver at least 96% of "on-time availability" for all operations and research facilities.
Agency Management & Operations Theme	
APG 10IT11	Complete all development projects within 110% of the cost and schedule baseline.
APG 10IT12	In 2010, reduce the amount of system execution time during the year end close process by six hours.
APG 10IT13	Deliver at least 90% of scheduled operating hours for all operations.
APG 10WF07	Using the Agency's Staffing and Recruitment System, NASA STARS, complete hiring actions–from date of vacancy announcement closing to the time an offer is made–within 45 days.
APG 10IPP08	Achieve a number of technology commercialization success from SBIR/STTR Phase II contracts through FY 2010 to equal 21% of the total number of SBIR/STTR contracts issued over the prior 5 years, including FY 2010.
Astrophysics Theme	
APG 10AS11	Complete all development projects within 110% of the cost and schedule baseline.
APG 10AS12	Deliver at least 90% of scheduled operating hours for all operations and research facilities.
APG 10AS13	Peer-review and competitively award at least 95%, by budget, of research projects.
APG 10AS14	Reduce time within which 80% of NRA research grants are awarded, from proposal due date to selection, by 5% per year, with a goal of 130 days.
Constellation Systems Theme	
APG 10CS13	Complete all development projects within 110% of the cost and schedule baseline.
APG 10CS14	Total annual cost of Constellation operations activities for the first full year after full operational capability, will be no greater than 70% of comparable annual shuttle operations costs (reference year FY 2007).
Earth Science Theme	
APG 10ES17	Complete all development projects within 110% of the cost and schedule baseline.
APG 10ES18	Deliver at least 90% of scheduled operating hours for all operations and research facilities.
APG 10ES19	Peer-review and competitively award at least 90%, by budget, of research projects.
APG 10ES20	Reduce time within which 80% of NRA research grants are awarded, from proposal due date to selection, by 5% per year, with a goal of 227 days.
Education Theme	
APG 10ED11	Reduce the dollar invested per number of page views for the NASA Education website.
APG 10ED12	Reduce the cost per elementary and secondary school program participant over FY 2009 amounts by 2%.
Heliophysics Theme	
APG 10HE09	Complete all development projects within 110% of the cost and schedule baseline.
APG 10HE12	Reduce time within which 80% of NRA research grants are awarded, from proposal due date to selection, by 5% per year, with a goal of 130 days.

FY 2010 Performance Plan
Uniform and Efficiency Measures

Measure	Description
International Space Station Theme	
APG 10ISS09	Deliver at least 90% of scheduled operating hours for all operations and research facilities.
Planetary Science Theme	
APG 10PS11	Complete all development projects within 110% of the cost and schedule baseline.
APG 10PS12	Deliver at least 90% of scheduled operating hours for all operations and research facilities.
APG 10PS13	Peer-review and competitively award at least 95%, by budget, of research projects.
APG 10PS14	Reduce time within which 80% of NRA research grants are awarded, from proposal due date to selection, by 5% per year, with a goal of 130 days.
Space and Flight Support Theme	
APG 10SFS12	Achieve at least 99% Space Network proficiency for delivery of Space Communications services.
APG 10SFS13	Complete all development projects within 110% of the cost and schedule baseline.
APG 10SFS14	Ratio of Launch Services program cost per mission to average spacecraft cost, reduced to 6.2%.
Space Shuttle Theme	
APG 10SSP06	Deliver at least 90% of scheduled operating hours for all operations and research facilities.